

Dust record found in ice cores

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Aeolian dust particles fall down, some of which are as dry fallout, and some with precipitation, toward the surface of the earth during their trip circulating over the globe. Depositing on a glacier surface, they are trapped in glacier ice, as surface snow being buried with the subsequent snow fall and the snow metamorphism. Glacier ice, hence, memorizes the past deposition history of dust particles. In other words, we are able to reconstruct the temporal change of dust flux deposited on the glacier surface by analyzing ice cores retrieved from the surface of glaciers downward. The ice core data, therefore, are of significance for validating an estimate of the past change of particle deposition onto the ground. The paper introduces the past works showing the temporal change of dust flux at several sites including central Eurasia.